

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES
(Attorney Docket № 13788US02)**

In the Application of:

Kan Frankie Fan

Serial № 10/644,205

Filed: August 20, 2003

For: METHOD AND SYSTEM FOR
TCP/IP USING GENERIC BUFFERS
FOR NON-POSTING TCP
APPLICATIONS

Examiner: Le Hien Luu

Group Art Unit: 2141

Confirmation № 5467

Electronically filed on 28-APR-2008

APPEAL BRIEF

Mail Stop Appeal Brief – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is an appeal from an Office Action dated November 14, 2007 ("Final Office Action"), in which claims 1-5, 7-15, 17-25, and 27-31 were finally rejected. The Applicant respectfully requests that the Board of Patent Appeals and Interferences ("Board") reverses the final rejection of claims 1-5, 7-15, 17-125, and 27-31 of the present application. **The Applicant notes that this Appeal Brief is timely filed within the period for reply that ends on April 28, 2008.**

REAL PARTY IN INTEREST
(37 C.F.R. § 41.37(c)(1)(i))

Broadcom Corporation, a corporation organized under the laws of the state of California, and having a place of business at 5300 California Avenue, Irvine, California 92617, has acquired the entire right, title and interest in and to the invention, the application, and any and all patents to be obtained therefor, as set forth in the Assignment recorded at Reel 014175, Frame 0966 in the PTO Assignment Search room.

RELATED APPEALS AND INTERFERENCES
(37 C.F.R. § 41.37(c)(1)(ii))

The Appellant is unaware of any related appeals or interferences.

STATUS OF THE CLAIMS
(37 C.F.R. § 41.37(c)(1)(iii))

Claims 1-31 were originally filed. Claims 6, 16, and 26 were cancelled and claims 32-34 were added. Claims 1-5, 7-25, 17-25, and 27-31 were finally rejected and claims 32-34 have been allowed. Pending claims 1-15, 7-25, 17-25, and 27-31 are the subject of this appeal.

The present application includes claims 1-5, 7-15, 17-25, and 27-34, which are pending in the present application. Claims 1-5, 7-15, 17-25 and 27-31 are rejected under 35 USC 102(e) as anticipated by U.S. Patent Application Publication No.

2003/0014544, issued to Pettey (hereinafter "Pettey"). See Final Office Action at page 2. The Applicant identifies claims 1-5, 7-15, 17-25 and 27-31 as the claims that are being appealed. The text of the pending claims is provided in the Claims Appendix.

STATUS OF AMENDMENTS
(37 C.F.R. § 41.37(c)(1)(iv))

The Applicant has not amended any claims subsequent to the final rejection of claims 1-5, 7-15, 17-25, and 27-34 mailed on November 14, 2007.

SUMMARY OF CLAIMED SUBJECT MATTER
(37 C.F.R. § 41.37(c)(1)(v))

The invention of claim 1 is illustratively described in the Specification of the present application in, for example, "Brief Summary of the Invention" section in pages 6-7, as well as in Figures 3-5. Certain embodiments of the invention provide a method and system for posting buffers for a non-posting TCP application (e.g., 302 in FIG. 3 or 402 in FIG. 4). See the present application, page 6, lines 2-3. Aspects of the invention may be found in a method and system for posting buffers for a non-posting TCP application. See *id.* at p. 6, lines 3-5. Aspects of the method may comprise posting at least one generic buffer (e.g., 326 in FIG. 3 and 426 in FIG. 4) located in a memory external to a host adapter (306 in FIG. 3 or 406 in FIG. 4) and transferring incoming data for a TCP connection to the posted generic buffer prior to the non-posting TCP

application (e.g., 302 in FIG. 3 or 402 in FIG. 4) posting a TCP application buffer (e.g., 304 in FIG. 3 or 404 in FIG. 4) for the incoming data. *See id.* at p. 6, lines 5-9; also, ¶¶0032-0045 and FIGS. 3-4.

Claims 2-5 and 7-10 are dependent upon claim 1.

The invention of claim 11 is illustratively described in the Specification of the present application in, for example, "Brief Summary of the Invention" section in pages 6-7, as well as in Figures 3-5. Another aspect of the invention may provide a machine-readable storage, having stored thereon a computer program having at least one code section for posting buffers for a non-posting TCP application. *See id.* at p. 6, lines 27-29. The at least one code section may be executable by a machine, thereby causing the machine to perform the steps described above in the method for posting buffers for a non-posting TCP application. *See id.* at p. 6, line 29 – p. 7, line 2.

Claims 12-15 and 17-20 are dependent upon claim 11.

The invention of claim 21 is illustratively described in the Specification of the present application in, for example, "Brief Summary of the Invention" section in pages 6-7, as well as in Figures 3-5. Aspects of the system may comprise posting at least one generic buffer (e.g., 326 in FIG. 3 and 426 in FIG. 4) located in a memory external to a host adapter by a processor. *See id.* at p. 7, lines 3-4. The processor may be at least one of a NIC (e.g., NIC 308 in FIG. 3 or 408 in FIG. 4), a generic buffer handler, a buffer post handler, a TCP notifier and a TCP data placement processor. *See id.* at p. 7, lines 5-6. In any case, the processor may be adapted to transfer incoming data for a TCP

connection to the posted generic buffer prior to the non-posting TCP application (e.g., 302 in FIG. 3 or 402 in FIG. 4) posting a TCP application buffer (e.g., 304 in FIG. 3 or 404 in FIG. 4) for the incoming data. *See id.* at p. 7, lines 6-9; also, ¶¶0032-0045 and FIGS. 3-4.

Claims 22-25 and 27-31 are dependent upon claim 21.

**GROUND OF REJECTION TO BE REVIEWED ON APPEAL
(37 C.F.R. § 41.37(c)(1)(vi))**

Claims 1-5, 7-15, 17-25 and 27-31 are rejected under 35 USC 102(e) as anticipated by U.S. Patent Application Publication No. 2003/0014544, issued to Pettey (hereinafter "Pettey").

ARGUMENT
(37 C.F.R. § 41.37(c)(1)(vii))

In the Final Office Action, Claims 1-5, 7-15, 17-25 and 27-31 are rejected under 35 USC 102(e) as anticipated by U.S. Patent Application Publication No. 2003/0014544, issued to Pettey (hereinafter "Pettey"). Without conceding that Pettey qualifies as prior art under 35 U.S.C. 102(e), the Applicant respectfully traverses this rejection as follows.

I. Claims 1-5, 7-15, 17-25, and 27-31 Are Not Anticipated by Pettey

Claims 1-5, 7-15, 17-25, and 27-31 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Pettey.

A. Independent Claims 1, 11, and 21

The Applicant turns to the rejection of claim 1 under 35 U.S.C. § 102(e) as being anticipated by Pettey. The Applicant submits that Pettey does not disclose or suggest at least the limitation of "transferring incoming data for a TCP connection to said at least one posted generic buffer **prior to the non-posting TCP application posting a TCP application posted buffer for said incoming data,**" as recited by the Applicant in the independent claim 1 (emphasis added).

With respect to independent claim 1, the Examiner states the following in the Final Office Action (page 3):

"Petty teaches the invention as claimed, including a method for posting buffers for a non-posting TCP application, the method comprising: posting at least one generic buffer located in a memory external to a host adapter (Fig 5; page 10, paragraphs [0088 - 0089]); and transferring incoming data for a TCP connection to said at least one posted generic buffer prior to the non-posting TCP application posting a TCP application posted buffer for said incoming data (page 10, paragraphs [0090 - 0091])." (See the Final Office Action at page 5).

The Applicant points out that Petty discloses efficient TCP/IP transaction from the HCA 502 to the MSG buffers 533 through the DMA logic 504. For example, Petty states:

"If acceleration of the connection is granted by the target adapter, then the target adapter sends a remote direct memory access (RDMA) read command to the HCA 502 designating the memory addresses of the applicable message buffers 533. Accordingly, the DMA logic 504 reads the message data from the applicable message buffers 533 and provides the data to the TCP-aware target adapter in an RDMA response, thus bypassing the server TCP/IP/MAC processing that is required to deliver the message data to the designated client over a native client LAN." (See Petty ¶[0093])

The Applicant points out that Petty's teaching of using RDMA bypassing of the server TCP/IP/MAC processing further substantiates that there is no teaching of "transferring incoming data for a TCP connection to said at least one posted generic buffer". Furthermore, the Applicant points out that **Petty is silent as to the timing of the transfer of any incoming data to a generic buffer that is external to a host adapter**. Namely, Petty, including ¶¶ 0088-0091, does not disclose or suggest that transferring of incoming data for a TCP connection is performed "prior to the non-posting TCP application posting a TCP application posted buffer for said incoming

data.” In fact, **Petty is silent and does not disclose any details with regard to the timing of the posting of TCP application posted buffers. Petty is also silent and does not disclose the use of a posted generic buffer and a separate TCP application posted buffer.**

Accordingly, independent claim 1 is not anticipated by Petty and is allowable. The Final Office Action does not provide any additional arguments with regard to the rejection of claims 11 and 21. Independent claims 11 and 21 are similar in many respects to the method disclosed in independent claim 1. Therefore, the Applicant submits that independent claims 11 and 21 are also allowable over the references cited in the Office Action at least for the reasons stated above with regard to claim 1.

Furthermore, The Applicant reserves the right to argue additional reasons beyond those set forth herein to support the allowability of claims 1, 11, and 21.

B. Examiner’s Response to Arguments

The Examiner states the following in the Final Office Action:

Petty teaches generic buffer (message buffer 533) and transferring incoming data for a TCP connection to said at least one posted generic buffer (the message buffer 533 receives incoming TCP/IP transaction data which includes TCP/IP connections. Petty, Fig 5; page 10, paragraphs [0088 - 0091].)

See the Final Office Action at page 4. The Applicant points out that Petty is silent as to the timing of the transfer of any incoming data to a generic buffer that is

external to a host adapter. Namely, **Petty**, including ¶¶ 0088-0091, does not disclose or suggest that transferring of incoming data for a TCP connection is performed prior to the posting of a TCP application posted buffer for the TCP connection. In fact, Petty is silent and does not disclose any details with regard to the timing of the posting of TCP application posted buffers. Petty is also silent and does not disclose the use of a posted generic buffer and a separate TCP application posted buffer.

In the January 29, 2008 Advisory Office Action, the Examiner states the he is entitled to interpret the reference very broadly. However, even a broad interpretation of Petty is not sufficient to overcome its deficiencies. The Examiner is reminded that a “posted buffer” is a known term in the art. Furthermore, as already stated above, Petty does not disclose the use of a “posted buffer”, as well as a “generic buffer.” Even a broad interpretation of Petty cannot overcome at least this deficiency.

C. Rejection of Dependent Claims 2-3, 12-13, and 22-23

Claims 2-3, 12-13, and 22-23 depend on independent claims 1, 11, and 21, respectively. Therefore, the Applicant submits that claims 2-3, 12-13, and 22-23 are allowable over the reference cited in the Final Office Action at least for the reasons stated above with regard to claim 1. The Applicant also submits that Petty does not disclose or suggest at least the limitation of “allocating at least one generic buffer from a

pool of available generic buffers upon receipt of said incoming data for said TCP connection," as recited by the Applicant in claim 2, or the limitation of "storing at least a portion of said incoming data in said allocated at least one generic buffer if said TCP application posted buffer is unable to accommodate said incoming data," as recited by the Applicant in claim 3.

With regard to claims 2 and 3, the Final Office Action states the following at page 3:

Petty teaches allocating at least one generic buffer from a pool of available generic buffers upon receipt of said incoming data for said TCP connection; storing at least a portion of said incoming data in said allocated at least one generic buffer if said TCP application posted buffer is unable to accommodate said incoming data (page 10, paragraph [0090]).

The Applicant would like to point out that Petty discloses, at the above citation (¶ 0090), that the application programs 531 are coupled to message buffers 533, which contain data to be transmitted via TCP/IP transactions or they designate memory locations into which TCP/IP transactions data is to be received. However, **Petty clearly does not disclose or suggest allocating of generic buffers upon receipt of incoming data, and storing at least a portion of incoming data in allocated generic buffer, if the TCP application posted buffer is unable to accommodate the incoming data**, as recited by the Applicant in claims 2 and 3. In fact, Petty is silent as to the use of a TCP application posted buffer, which is separate from the generic buffer. Obviously, Petty does not make any attempts to accommodate the incoming data in a

posted buffer and, if the posted buffer is unable to accommodate, then Pettley still does not disclose that the incoming data is stored in the allocated generic buffer.

Accordingly, the Applicant submits that claims 2-3 are allowable over the reference cited in the Final Office Action at least for the above reasons. The Final Office Action does not provide any additional arguments with regard to the rejection of claims 12-13 and 22-23. Claims 12-13 and 22-23 are similar in many respects to the method disclosed in claims 2-3. Therefore, the Applicant submits that claims 12-13 and 22-23 are also allowable over the references cited in the Office Action at least for the reasons stated above with regard to claims 2-3.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 2-3, 12-13, and 22-23.

D. Rejection of Dependent Claims 4-5, 14-15, and 24-25

Claims 4-5, 14-15, and 24-25 depend on independent claims 1, 11, and 21, respectively. Therefore, the Applicant submits that claims 4-5, 14-15, and 24-25 are allowable over the reference cited in the Final Office Action at least for the reasons stated above with regard to claim 1. The Applicant also submits that Pettley does not disclose or suggest at least the limitation of "determining whether said incoming data for said TCP connection transferred to said at least one posted generic buffer is in sequence," as recited by the Applicant in claim 4, or the limitation of "assembling said

incoming data in said at least one posted generic buffer if said incoming data is out of sequence," as recited by the Applicant in claim 5.

With regard to claims 4 and 5, the Final Office Action states the following at page 3:

Petty determining whether said incoming data for said TCP connection transferred to said at least one posted generic buffer is in sequence; assembling said incoming data in said at least one posted generic buffer if said incoming data is out of sequence (page 7, paragraphs [0066 - 0067]).

Petty discloses, at ¶¶ 0066-0067, a timing diagram, as illustrated in more detail in Petty's FIG. 3. More specifically, FIG. 3 of Petty illustrates the sequence of TCP/IP network frames that are processed by the server illustrated in FIG. 2. As seen from FIG. 3, the exchanged frames also utilize a checksum field, which is used by a receiving NIC to detect errors that occur during transmission. However, at the above citation, Petty does not disclose or suggest determining whether the incoming data for the TCP connection transferred to the posted generic buffer is in sequence. In fact, Petty does not even disclose transferring of a TCP connection to a posted buffer. Furthermore, Petty does not disclose assembling of the incoming data in the posted generic buffer, if the incoming data is out of sequence, as recited in Appellant's claims 4-5.

Accordingly, the Applicant submits that claims 4-5 are allowable over the reference cited in the Final Office Action at least for the above reasons. The Final Office Action does not provide any additional arguments with regard to the rejection of claims 14-15 and 24-25. Claims 14-15 and 24-25 are similar in many respects to the

method disclosed in claims 4-5. Therefore, the Applicant submits that claims 14-15 and 24-25 are also allowable over the references cited in the Office Action at least for the reasons stated above with regard to claims 4-5.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 4-5, 14-15, and 24-25.

E. Rejection of Dependent Claims 7-8, 17-18, and 27-28

Claims 7-8, 17-18, and 27-28 depend on independent claims 1, 11, and 21, respectively. Therefore, the Applicant submits that claims 7-8, 17-18, and 27-28 are allowable over the reference cited in the Final Office Action at least for the reasons stated above with regard to claim 1. The Applicant also submits that Pettay does not disclose or suggest at least the limitation of "polling said at least one posted generic buffer by the non-posting TCP application to determine when said at least one posted generic buffer contains data for said TCP connection," as recited by the Applicant in claim 7, or the limitation of "notifying the non-posting TCP application when said incoming data is stored in said at least one posted generic buffer," as recited by the Applicant in claim 8.

With regard to claims 7 and 8, the Final Office Action states the following at pages 3-4:

Pettay teaches polling said at least one posted generic buffer by the non-posting TCP application to determine when said at least one posted generic buffer contains data for said TCP connection; in response to said

polling, notifying the non-posting TCP application when said incoming data is stored in said at least one posted generic buffer (pages 10-11 , paragraphs [0092 - 0093]).

Petty discloses, at ¶¶ 0092-0093, how a TCP/IP transaction is carried out between an application program (531) on the server and a corresponding client application. However, Petty at the above citation, does not disclose or suggest polling of a posted generic buffer by the non-posting TCP application to determine when the posted generic buffer contains data for said TCP connection, as recited by the Applicant in claim 7. In fact, Petty does not even disclose the use of a posted generic buffer. Furthermore, Petty also does not disclose notifying the non-posting TCP application when the incoming data is stored in the posted generic buffer, as recited by the Applicant in claim 8. In fact, Petty does not even disclose any processing with regard to a non-posting TCP application.

Accordingly, the Applicant submits that claims 7-8 are allowable over the reference cited in the Final Office Action at least for the above reasons. The Final Office Action does not provide any additional arguments with regard to the rejection of claims 17-18 and 27-28. Claims 17-18 and 27-28 are similar in many respects to the method disclosed in claims 7-8. Therefore, the Applicant submits that claims 17-18 and 27-28 are also allowable over the references cited in the Office Action at least for the reasons stated above with regard to claims 7-8.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 7-8, 17-18, and 27-28.

F. Rejection of Dependent Claims 9-10, 19-20, and 29-30

Claims 9-10, 19-20, and 29-30 depend on independent claims 1, 11, and 21, respectively. Therefore, the Applicant submits that claims 9-10, 19-20, and 29-30 are allowable over the reference cited in the Final Office Action at least for the reasons stated above with regard to claim 1. The Applicant also submits that Pettey does not disclose or suggest at least the limitation of "posting at least one generic buffer prior to said transferring of said incoming data for a TCP connection to at least a portion of available TCP application buffers," as recited by the Applicant in claim 9, or the limitation of "posting at least one posted generic buffer located in a memory internal to said host adapter," as recited by the Applicant in claim 10.

With regard to claims 9 and 10, the Final Office Action states the following at pages 3-4:

Pettey teaches posting at least one generic buffer prior to said transferring of said incoming data for a TCP connection to at least a portion of available TCP application buffers; posting at least one posted generic buffer located in a memory internal to said host adapter (page 10, paragraph [0090 - 0092]).

The Applicant would like to point out that Pettey discloses, at the above citation (¶ 0090-0091), that the application programs 531 are coupled to message buffers 533, which contain data to be transmitted via TCP/IP transactions or they designate memory locations into which TCP/IP transactions data is to be received. Pettey also discloses, at ¶ 0092, how a TCP/IP transaction is carried out between an application program (531)

on the server and a corresponding client application. However, Pettey at the above citation, does not disclose or suggest posting at least one generic buffer prior to the transferring of the incoming data for a TCP connection to at least a portion of available TCP application buffers, as recited by the Applicant in claim 9. In fact, Pettey does not even disclose the use of a posted generic buffer. Furthermore, Pettey also does not disclose posting at least one posted generic buffer located in a memory internal to the host adapter, as recited by the Applicant in claim 10. In fact, Pettey does not even disclose any processing with regard to a non-posting TCP application.

Accordingly, the Applicant submits that claims 9-10 are allowable over the reference cited in the Final Office Action at least for the above reasons. The Final Office Action does not provide any additional arguments with regard to the rejection of claims 19-20 and 29-30. Claims 19-20 and 29-30 are similar in many respects to the method disclosed in claims 9-10. Therefore, the Applicant submits that claims 19-20 and 29-30 are also allowable over the references cited in the Office Action at least for the reasons stated above with regard to claims 9-10.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 9-10, 19-20, and 29-30.

G. Rejection of Dependent Claim 31

Claim 31 depends on independent claim 21. Therefore, the Applicant submits that claim 31 is allowable over the reference cited in the Final Office Action at least for the reasons stated above with regard to claim 21.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claim 31.

CONCLUSION

For at least the foregoing reasons, the Applicant submits that claims 1-5, 7-15, 17-25, and 27-31 are in condition for allowance. Reversal of the Examiner's rejection and issuance of a patent on the application are therefore requested.

The Commissioner is hereby authorized to charge \$510 (to cover the Brief on Appeal Fee) and any additional fees or credit any overpayment to the deposit account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

Respectfully submitted,

Date: 28-APR-2008

By: /Ognyan I. Beremski/
Ognyan Beremski, Reg. No. 51,458
Attorney for Applicant

McANDREWS, HELD & MALLOY, LTD.
500 West Madison Street, 34th Floor
Chicago, Illinois 60661
Telephone: (312) 775-8000
Facsimile: (312) 775 – 8100

(OIB)

CLAIMS APPENDIX
(37 C.F.R. § 41.37(c)(1)(viii))

1. A method for posting buffers for a non-posting TCP application, the method comprising:

posting at least one generic buffer located in a memory external to a host adapter; and

transferring incoming data for a TCP connection to said at least one posted generic buffer prior to the non-posting TCP application posting a TCP application posted buffer for said incoming data.

2. The method according to claim 1, comprising allocating at least one generic buffer from a pool of available generic buffers upon receipt of said incoming data for said TCP connection.

3. The method according to claim 2, comprising storing at least a portion of said incoming data in said allocated at least one generic buffer if said TCP application posted buffer is unable to accommodate said incoming data.

4. The method according to claim 1, comprising determining whether said incoming data for said TCP connection transferred to said at least one posted generic buffer is in sequence.

5. The method according to claim 4, wherein said determining comprises assembling said incoming data in said at least one posted generic buffer if said incoming data is out of sequence.

7. The method according to claim 1, comprising polling said at least one posted generic buffer by the non-posting TCP application to determine when said at least one posted generic buffer contains data for said TCP connection.

8. The method according to claim 7, comprising, in response to said polling, notifying the non-posting TCP application when said incoming data is stored in said at least one posted generic buffer.

9. The method according to claim 1, comprising posting at least one generic buffer prior to said transferring of said incoming data for a TCP connection to at least a portion of available TCP application buffers.

10. The method according to claim 1, comprising posting at least one posted generic buffer located in a memory internal to said host adapter.

11. A machine-readable storage, having stored thereon a computer program having at least one code section for posting buffers for a non-posting TCP application,

the at least one code section executable by a machine for causing the machine to perform the steps comprising:

posting at least one generic buffer located in a memory external to a host adapter; and

transferring incoming data for a TCP connection to said at least one posted generic buffer prior to the non-posting TCP application posting a TCP application posted buffer for said incoming data.

12. The machine-readable storage according to claim 11, comprising code for allocating at least one generic buffer from a pool of available generic buffers upon receipt of said incoming data for said TCP connection.

13. The machine-readable storage according to claim 12, comprising code for storing at least a portion of said incoming data in said allocated at least one generic buffer if said TCP application posted buffer is unable to accommodate said incoming data.

14. The machine-readable storage according to claim 11, comprising code for determining whether said incoming data for said TCP connection transferred to said at least one posted generic buffer is in sequence.

15. The machine-readable storage according to claim 14, comprising code for assembling said incoming data in said at least one posted generic buffer if said incoming data is out of sequence.

17. The machine-readable storage according to claim 11, comprising code for polling said at least one posted generic buffer by the non-posting TCP application to determine when said at least one posted generic buffer contains data for said TCP connection.

18. The machine-readable storage according to claim 17, comprising code for notifying the non-posting TCP application when said incoming data is stored in said at least one posted generic buffer in response to said polling.

19. The machine-readable storage according to claim 11, comprising code for posting at least one generic buffer prior to said transferring of said incoming data for a TCP connection to at least a portion of available TCP application buffers.

20. The machine-readable storage according to claim 11, comprising code for posting at least one posted generic buffer located in a memory internal to said host adapter.

21. A system for posting buffers for a non-posting TCP application, the system comprising:

at least one generic buffer located in a memory external to a host adapter;

at least one processor that posts said at least one generic buffer located in said memory external to said host adapter; and

said at least one processor transfers incoming data for a TCP connection to said at least one posted generic buffer prior to the non-posting TCP application posting a TCP application posted buffer for said incoming data.

22. The system according to claim 21, wherein said at least one processor allocates at least one generic buffer from a pool of available generic buffers upon receipt of said incoming data for said TCP connection.

23. The system according to claim 22, wherein said at least one processor stores at least a portion of said incoming data in said allocated at least one generic buffer if said TCP application posted buffer is unable to accommodate said incoming data.

24. The system according to claim 21, wherein said at least one processor determines whether said incoming data for said TCP connection transferred to said at least one posted generic buffer is in sequence.

25. The system according to claim 24, wherein said at least one processor assembles said incoming data in said at least one posted generic buffer if said incoming data is out of sequence.

27. The system according to claim 21, wherein said at least one processor polls said at least one posted generic buffer by the non-posting TCP application to determine when said at least one posted generic buffer contains data for said TCP connection.

28. The system according to claim 27, wherein said at least one processor notifies the non-posting TCP application when said incoming data is stored in said at least one posted generic buffer in response to said polling.

29. The system according to claim 21, wherein said at least one processor posts at least one generic buffer prior to said transferring of said incoming data for a TCP connection to at least a portion of available TCP application buffers.

30. The system according to claim 21, wherein said at least one processor posts at least one posted generic buffer located in a memory internal to said host adapter.

31. The system according to claim 21, wherein said at least one processor is at least one of a NIC, a generic buffer handler, a buffer post handler, an application, a TCP notifier and a TCP data placement processor.

EVIDENCE APPENDIX
(37 C.F.R. § 41.37(c)(1)(ix))

- (1) United States Patent Application Publication No. 2003/0014544 ("Petty"), entered into record by the Examiner in the June 18, 2007 Office Action.

**RELATED PROCEEDINGS APPENDIX
(37 C.F.R. § 41.37(c)(1)(x))**

The Appellant is unaware of any related appeals or interferences.